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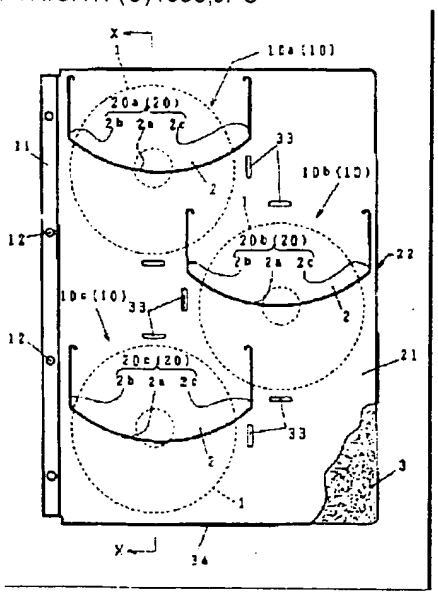
(54)**COMPACT DISK HOLDER**

(57)Abstract:

PURPOSE: To provide a holder which can receive and store numerous CDs in a small space in a small bulk and which is convenient to use.

CONSTITUTION: A compact disk holder for receiving and storing a CD 1 comprises surface and rear cover sheets 21, 22 made of flexible synthetic resin wherein peripheries are integrally welded to each other and a non-woven fabric sheet 3 interposed between the cover sheets 21, 22 and having a size and shape approximately aligning with the sheets 21, 22. Slits 20, 20 are formed over a range longer than a diameter of a CD 1 at a plurality of opposite portions of the surface and rear cover sheets 21, 22. And at a lower region of each slit 20, a welded support 33 is formed comprising the cover sheets 21, 22 and the non-woven fabric sheet 3 welded at a section along a lower half circumference of a circle having a diameter slightly larger than that of the CD 1.



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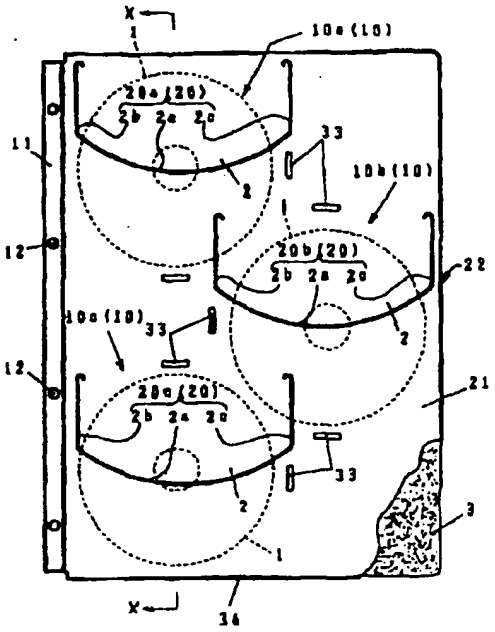
(54) [Title of the Invention] Compact disc holder

(57) [Abstract]
[Objective] To provide a holder for compact discs in which, without bulkiness, a large number of CDs (1) can be housed, which holder can house and hold a large number of CDs in a small space, and is convenient to use.
[Structure] Compact disc holder for housing and holding CDs (1), which

compact disc holder comprises top and bottom cover sheets (21), (22) made of a flexible synthetic resin in which the perimeter parts thereof are integrally welded to each other, and a non-woven fabric sheet (3) interposed between the cover sheets (21), (22) and having a size and shape which approximately matches said cover sheets, in which compact disc holder, slits (20), (20) are formed in a plurality of opposing positions in the abovementioned top and bottom cover sheets (21),(22) across a range greater than the diameter of the CDs (1) and, in the region below the abovementioned slits (20), in a section which extends across the lower half of a circle having a slightly larger diameter than that of the CDs (1), the cover sheets (21), (22) and the non-woven fabric sheet (3) are welded to form a support part (33).



[Claims]

[Claim 1] Compact disc holder for housing and holding CDs (1), which compact disc holder comprises top and bottom cover sheets (21), (22) made of a flexible synthetic resin in which the perimeter parts thereof are integrally welded to each other, and a non-woven fabric sheet (3) interposed between the cover sheets (21), (22) and having a size and shape which approximately matches said cover sheets, in which compact disc holder, slits (20), (20) are formed in a plurality of opposing positions in the abovementioned top and bottom cover sheets (21), (22) across a range greater than the diameter of the CDs (1) and, in the region below the abovementioned slits (20), in a section which extends across the lower half of a circle having a slightly larger diameter than that of the CDs (1), the cover sheets (21), (22) and the non-woven fabric sheet (3) are welded to form a support part (33).

[Claim 2] Compact disc holder according to Claim 1, in which the slit (20) is configured from a horizontal slit (2a) formed in the approximately horizontal direction and a pair of extending slits which extend upward from both ends of said horizontal slit (2a), wherein the region enclosed by said horizontal slit (2a) and the extending slits (2b), (2c) form a cover piece (2), the welded support part (33) or perimeter welded parts of the cover shleets (21), (22) are positioned in opposing

upper and lower and left and right positions of said cover piece (2), the length between these welded parts is set to be slightly larger than the diameter of the CDs (1), and the abovementioned extending slits (2b), (2c) extend in an approximately vertical direction to the vicinity of the welded part above the cover piece (2).

[Claim 3] Compact disc holder according to Claim 2, wherein a binder piece (11), in which a large number of binder holes (12), (12) are formed, is formed to extend outward from one side edge of the cover sheets (21), (22) and, in three places, that is, in the vicinity of the upper edge of the rear sheets (21), (22) toward the side edge of the abovementioned binder piece (11) side, diagonally below this toward the other side edge, and diagonally further below this in the vicinity of the lower edge toward the side edge of the abovementioned binder piece (11) side, a first, second, and third slit (20a) ,(20b), (20c) are respectively formed and, in each of the positions: below the abovementioned first slit (20a) on the side opposing the binder piece (11); above and below the abovementioned second slit (20b) on the side toward the binder piece (11); and above the abovementioned third slit (20c) on the side opposing the binder piece (11), welded support parts (33), (33) are formed, and the length between the abovementioned welded support parts (33) and the perimeter welded parts of the cover sheets (21), (22), or,

the length between the welded support parts (33), (33), is set to be larger than the diameter of the CDs (1).

[Detailed Description of the Invention]

[0001]

[Field of Industrial Utilization] The present invention relates to a compact disc holder in which, without bulkiness, a large number of compact discs can be housed and stored.

[0002]

[Prior Art] Compact discs (hereinafter referred to as CDs), which have come into general use and have replaced the records of the prior art, are optical disks that have a thin discoidal shape, a diameter of 12 cm, and are generally and popularly housed in rectangular cases made of a hard type resin. It is usual for them to be housed in the abovementioned cases after purchase. By virtue of this, and despite the fact that the CDs themselves are formed as a thin sheet, because they must be placed next to each other in the abovementioned cases, a significant amount of space is required for the arrangement and holding of a large number thereof.

[0003] A variety of CD holders has been designed in the prior art and, in each case, they are of a rack-type with a strong

furniture-like element that, because of its bulk, cannot be carried about easily within the room.

[0004]

[Technological Problems] The technological problem facing the present invention is, in a "compact disc holder for housing and storing CDs (1)", to provide, in order that a large number of CDs can be housed and held without bulk in a small space, and even in a state in which the CDs (1) are not housed in the hard resin type cases of the prior art, a CD housing part (10) in which the CDs (1) themselves can be housed and held without damage in a stable state.
[Pertaining to Claim 1].

[0005]

[Technological Means] The technological means of the invention of Claim 1, which solves the above-described problems, "comprises top and bottom cover sheets (21), (22) made of a flexible synthetic resin in which the perimeter parts thereof are integrally welded to each other, and a non-woven fabric sheet (3) interposed between the cover sheets (21), (22) and having a size and shape which approximately matches said cover sheets, in which compact disc holder, slits (20), (20) are formed in a plurality of opposing positions in the abovementioned top and bottom cover sheets (21),(22) across a range greater than the diameter of the

CDs (1) and, in the region below the abovementioned slits (20), in a section which extends across the lower half of a circle having a slightly larger diameter than that of the CDs (1), the cover sheets (21), (22) and the non-woven fabric sheet (3) are welded to form a support part (33)."

[0006]

[Action] The above-described technological means has the following action. By virtue of the fact that the CD holder is configured by the interposing of the non-woven sheet (3) of a size and shape which approximately matches the area between two cover sheets (21), (22), the cover sheets (21), (22) form a top and bottom surface thereof, and the non-woven sheet (3) functions as a partition wall therebetween.

[0007] A plurality of slits (20), (20) longer than the diameter of the CDs (1) are formed in predetermined positions of the abovementioned cover sheets (21), (22), and the CDs (1), which have been taken out of their individual cases, can be inserted through the slits between the cover sheet (21) and the non-woven sheet (3), and between the cover sheet (22) and the non-woven sheet (3). It will be noted that, in the region below the abovementioned slits (20) and, furthermore, in the section which extends across the lower half of a circle slightly larger in diameter than the CDs (1), the cover sheets (21), (22) and the

non-woven sheet (3) are welded to form welded support parts (33), (33) so that the CDs (1) inserted to the inner side of the cover sheets (21), (22) through the abovementioned slits (20) are housed within the region enclosed by the respective support welded parts (33), (33). That is to say, they are housed in the region between the abovementioned cover sheet (21) and the non-woven sheet (3), and the region between the cover sheet (22) and the non-woven sheet (3) wherein, furthermore, the regions enclosed by the abovementioned welded support parts (33), (33) function as the respective CD housing parts (10), (10).

[0008] In addition, because the perimeter parts of the cover sheet (21) and cover sheet (22) are integrally welded across the entire region, these perimeter parts can be used as one part of the abovementioned CD housing part (10). It will be noted that the abovementioned slits (20), (20) are formed in opposing positions on the cover sheets (21), (22) and, by virtue of the fact that predetermined spots, which include the abovementioned slits (20) (20), are welded to each other through the non-woven sheet (3), the abovementioned CD housing parts (10), (10) are formed back-to-back and in the same position on the top and bottom of the non-woven sheet (3).

[0009]

[Effect] Although the cover sheets (21), (22) are configured from a soft synthetic resin, because a non-woven sheet (3) is interposed therebetween, the formation of a CD housing part (10) - which comprises the cover sheet (21) and the non-woven sheet (3) and the cover sheet (22) and the non-woven sheet (3) - in which there is no inconvenience of a sticking of the CDs to each other during periods of high temperature such as in the summer period, can be reliably ensured.

[0010] Because the holder is configured from three thin sheets, that is, the cover sheets (21), (22) and the non-woven sheet (3), a plurality of CDs (1), in a state in which they have been taken out from their cases, can be housed between these cover sheets (21), (22) and the non-woven sheet (3), wherein a large number of CDs (1) can be housed and held without bulkiness and, accordingly, can be moved about easily in this state. The CDs (1), which have been inserted between the cover sheet (21) and the non-woven sheet (3), and between the cover sheet (22) and the non-woven sheet (3), are stored in the region (CD housing part) enclosed by the welded support parts (33), (33) and, because there is no inadvertent movement across said CD housing parts (10), (10), the arrangement of the CDs (1) is one in which they are normally housed in a stable state.

[0011] The support welded parts (33), (33), which are formed by the welding together of the cover sheets (21) and (22) through the non-woven sheet (3), are formed by the welding across the partial or entire region of a section which extends across the lower half of a circle of slightly larger diameter than the CDs (1), so the CDs (1) are housed in a fairly close fitted state within the CD housing parts (10). By virtue of this, there is no fear that the CDs (1) will fall inadvertently from the CD housing parts (10).

[0012] In addition, even if an exterior shock were received whilst being housed, because the non-woven slit (3) also functions as a cushion, damage to the CDs (1) themselves can be prevented.

[Regarding Claim 2] The CD holder of the invention of Claim 2, which solves the same problem as the problem of Claim 1, affords the housing of the CDs 1 in an even more reliable protected state. The technological means designed for this purpose is "a slit (20) configured from a horizontal slit (2a) formed in the approximately horizontal direction, and a pair of extending slits (2b), 2(c) which extend upward from both ends of said horizontal slit (2a), wherein the region enclosed by said horizontal slit (2a) and the extending slits (2b), (2c) forms a cover piece (2), the welded support part (33) or perimeter welded parts of the cover sheets (21), (22) are positioned in opposing upper and

lower and left and right positions of said cover piece (2), the length between these welded parts is set to be slightly larger than the diameter of the CDs (1), and the abovementioned extending slits (2b), (2c) extend in an approximately vertical direction to the vicinity of the welded part above the cover piece (2)."

[0013]

[Action] The slit (20) is configured from a horizontal slit (2a) formed in the approximately horizontal direction, and a pair of extending slits (2a), (2b) which extend upward from both ends of said horizontal slit (2a) and so, as a whole, an approximately U-shape is formed. By virtue of this, if the lower end part of the cover piece (2) is pulled up, said cover piece (2) will be opened. The CDs (1) can be inserted between the cover sheets (21), (22) and non-woven sheet (3) through this opening part.

[0014] By virtue of the fact that either the welded support part (33) or the perimeter welded parts of the cover sheets (21), (22) are positioned in each opposing upper and lower and left and right position across the abovementioned cover piece (2), and the length between these welded parts is set to be slightly larger than the diameter of the CDs (1), the abovementioned CDs (1) inserted through the abovementioned

opening part are, firstly, housed across the range from the abovementioned horizontal slit (2a) to the lower welded part. The length between these welded parts is set to be slightly larger than the diameter of the CDs (1) and, because the extending end of the abovementioned extending slits (2b), (2c) extends in the approximately vertical direction to the region of the above-positioned welded part, the cover piece (2) does not form an obstruction when the CDs (1) are housed through the abovementioned opening part and, when the abovementioned cover piece (2) is closed, the section of the CDs (1) exposed upward through the abovementioned horizontal slit (2a) is covered by the abovementioned cover piece (2), wherein the CDs (1) are housed in a mode in which they are enclosed by the upper and lower and left and right welded parts.

[0015]

[Effect] The horizontal slit (2a) is formed in the approximately horizontal direction so that the CDs (1) can be housed through the top of the horizontal slits (2a), and the CDs (1) are easy to house. Furthermore, the upper part regions of the CDs (1) are covered by the cover piece (2) and so the CDs (1) can be prevented from falling out of the CD housing part (10) and, because said cover piece (2) also functions as a lid for the CD housing part (10), the attachment of dust or the like to the CDs (1) during housing can be prevented.

[0016]

[Embodiment] Next, a description will be given of an embodiment of the above-described invention with reference to the diagrams. The CD holder of the embodiment of the present invention is configured by the sandwiching of a non-woven sheet (3) between two cover sheets (21), (22) made of a soft synthetic resin, the size of the abovementioned cover sheets (21), (22) is A4, and the abovementioned non-woven sheet (3) is formed to be slightly smaller than the abovementioned cover sheets (21), (22). The entire region of the perimeter parts of these cover sheets (21), (22) are welded to form a space between the abovementioned cover sheet (21) and the non-woven sheet (3), and between the abovementioned cover sheet (22) and the non-woven sheet (3), and predetermined positions on the cover sheets (21), (22) are partially welded through the non-woven sheet (3) to form a configuration in which the space between the top and bottom of the abovementioned non-woven sheet (3) is divided into three CD housing parts (10a), (10b) and (10c) respectively.

[0017] It will be noted that a binder piece (11) is formed so as to protrude from one side edge side of the cover sheets (21), (22), and a plurality of binder holes (12), (12) for binding to a binder are provided in the binder piece (11). As shown in Figure 1, approximately U-shaped slits (20a), (20b), (20c) comprising a downward-facing circular-arc shaped horizontal slit (2a) and left

and right extending slits (2b), (2c) which extend vertically upward from both ends of said horizontal slit (2a) are formed in the upper part region, middle region, and lower part region, respectively, of the cover sheets (21), (22), and the length between both ends of the abovementioned horizontal slit (2a) is set to be longer than the diameter of the CDs (1).

[0018] The distance to the upper edge of the cover sheets (21), (22) from the horizontal slit (2a) of the first slit (20a) positioned in the upper part, and the distance to the lower edge of the cover sheets (21), (22) from the horizontal slit (2a) of the third slit (20c) positioned in the lower part, is set to be a little longer than the radius of the CDs (1), the extending slits (2b), (2b) in these two slits (20a), (20c) are position-determined in such a way as to be adjacent to the abovementioned binding piece (11) while, on the other hand, the horizontal slit (2a) of the second slit (20b) - positioned in the middle thereof - is positioned approximately the same distance from the horizontal slit (2a), (2a) of the abovementioned top and bottom slits (20a), (20c), while the extending slit (2c) is formed toward the other side edge of the cover sheets (21), (22) (side in which the binding piece (11) is not formed).

[0019] The two cover sheets (21), (22) are placed on top of each other in such a way that these three first, second, and

third slits (20a), (20b), (20c) are opposing each other, and the perimeter part of said cover sheets (21), (22) and the binding piece (11) are welded to form a welded part (34). Furthermore, predetermined spots on the cover sheets (21), (22) which envelop the abovementioned first, second and third slits (20a), (20b), (20c) are partially welded through the non-woven sheets (3) to form welded support parts (33), (33). More specifically, the welded support parts (33), (33) are formed in a total of seven positions, that is, below the abovementioned first slit (20a) and in the vicinity of the other extending slit (2c), above and below the second slit (20b) and in the vicinity of the extending slit (2b), and above the third slit (20c) and in the vicinity of the extending slit (2c).

[0020] It will be noted that the distance between the top and bottom opposing top and bottom perimeter welded parts (34) of the cover sheets (21), (22), between which is the abovementioned horizontal slit (2a), and the welded support parts (33) opposing therewith, or, the distance between the welded support parts (33), (33), and, the distance between the welded part (34) of the side edge 0 of the cover sheets (21), (22) and the left and right opposing welded support parts (33) between which is said horizontal slit (2a), are respectively set to be slightly larger than the diameter of CDs (1).

[0021] As a result, the upper edge of the cover sheets (21), (22), the side edge of the side in which the binding piece (11) is formed, and the region enclosed by the two welding support parts (33), (33) which are respectively formed in opposing positions on the upper edge and one side edge, form the first CD housing part (10a), and positioned diagonally below this first CD housing part (10a), the region enclosed by the other side edge of the cover sheets (21), (22) on the side in which the binder piece (11) is not formed, the opposing position thereto, and the three welding support parts (33), (33) formed in opposing positions above and below the horizontal slit (2a), forms the second CD housing part (10b), and positioned diagonally below this second CD housing part (10b), the region enclosed by the lower edge of the cover sheets (21), (22), the side edge of the abovementioned binder piece (11), and the two welding support parts (33), (33) formed in an opposing position therewith, function as a third housing part (10c).

[0022] In this way, three CD housing parts (10a), (10b), (10c) are formed in a single surface side of the non-woven sheet (3) which is covered by the cover sheet (21), and three CD housing parts, (10c) are formed in the other surface side of the non-woven sheet (3) which is covered by the cover sheet so that a total of six CD housing parts are formed in one CD holder in which it is possible for six CDs (1) to be housed.

[0023] It will be noted that, the abovementioned extending slits (2b), (2c) extend to the upper edge of the CD housing parts. Because the dimensional relationships and positions in which the slits (20a), (20b), (20c) are formed in the above-described CD housing parts is as described above, the horizontal slits (2a) of each slit are positioned almost in the middle of each CD housing part (10) and, for the housing of the CDs (1) in the CD housing part (10), as shown in Figure 2, the cover piece (2) enclosed by the horizontal slits (2a) and the extending slit are opened, whereby, first, only the lower half section of the CDs (1) is housed in the CD housing part (10) after which, by the covering of the upper half part of these CDs (1) by the abovementioned cover pieces (2), (2), the whole of the CDs (1) can be housed within the CD housing part (10).

[0024] In this embodiment, the size of the cover sheets (21), (22) is A4 and, because a binder piece (11) - in which a plurality of binder holes (12), (12) are formed - is provided in the one edge side thereof, the holder can be housed in a marketed A4 size binder by using said binder piece (11). As a result, the CDs (1) can be stored in a file or a pocket album or the like which does not take up much space and can be easily moved about.

[0025] It will be noted that the size and shape of the holder is not limited to an A4 size and other sizes and shapes are suitable and, it goes without saying that this may be set as appropriate in accordance with the size and shape of the plurality of cover sheets (21), (22) and the number of CD housing parts (10) which make up the one holder.

[Brief Description of the Diagrams]

[Figure 1] is a explanatory diagram of the compact disc holder of the embodiment of the present invention; and

[Figure 2] is a cross-sectional view along the line X-X in the state in which the CDs (1) have been housed.

[Explanation of the Symbols]

(1) Compact disc (CD)

(21), (22) Cover sheets

(20) Slit

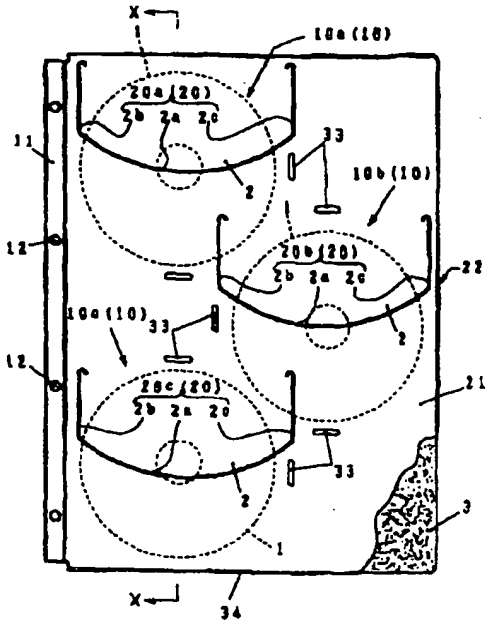
(3) Non-woven sheet

(33) Welded support part

(2a) Horizontal slit

(2b), (2c) Extending slits

[Fig. 1]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20a(20)
2b 2a 2c
11
33
10b(10)
12
20b(20)
2b 2a 2c
22
10a(10)
33
12
20c(20)
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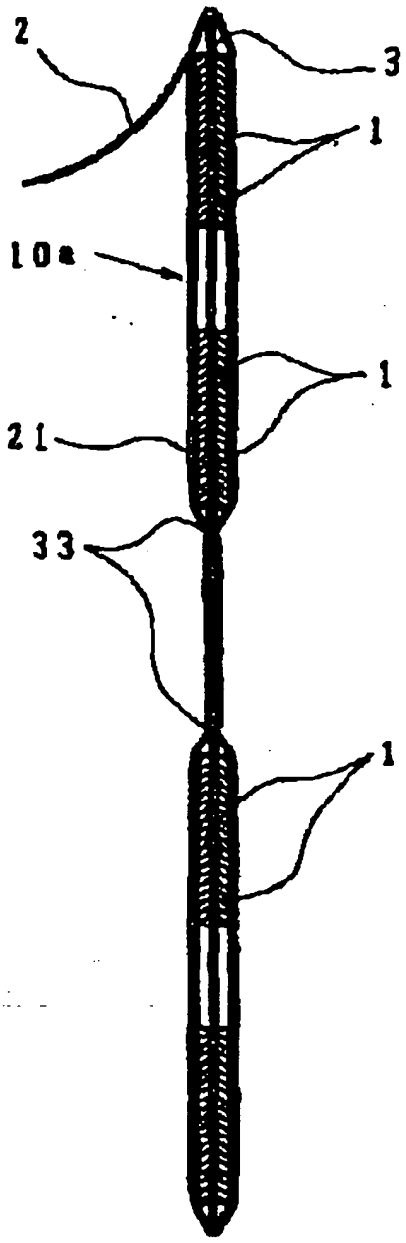
33
2
1
3
X
34

[Fig. 2]


2
3
1
10a
1
21
33
1